# Brunswick County Planning Area

# Solid Waste Management Plan 3-Year Update

County of Brunswick Bald Head Island

**Belville** 

**Bolivia** 

**Boiling Spring Lakes** 

Calabash

**Carolina Shores** 

**Caswell Beach** 

**Holden Beach** 

Leland

Navassa

Northwest

Oak Island

Ocean Isle Beach

Sandy Creek

**Shallotte** 

**Southport** 

St. James

**Sunset Beach** 

Varnamtown

December 2012

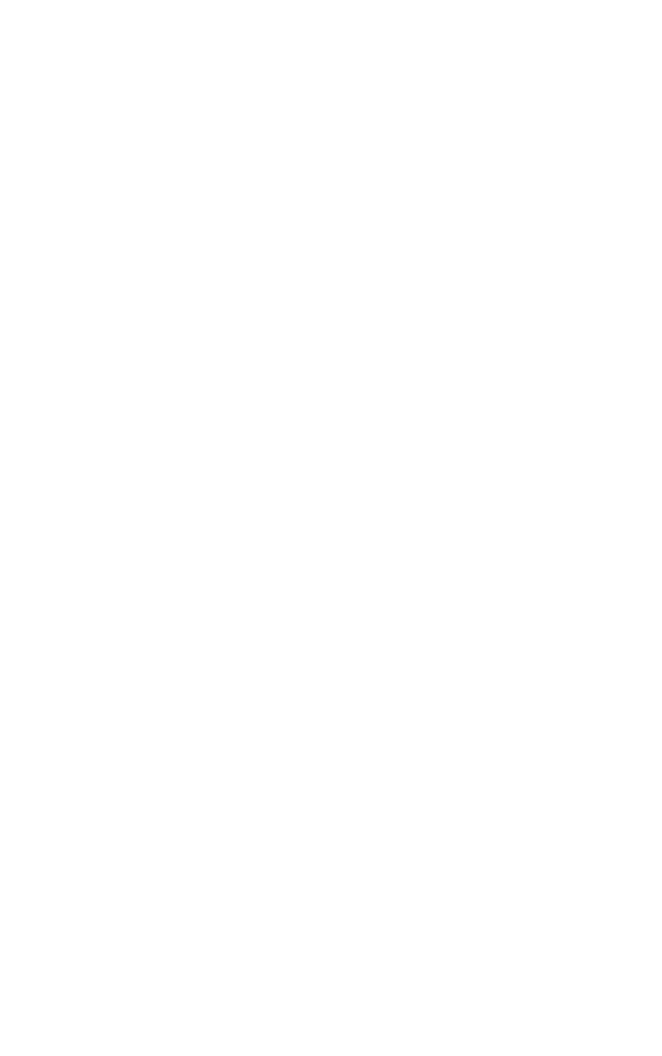


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#### INTRODUCTION

This plan was prepared in accordance with N.C. General Statute 130A-309.09A (b) for the purpose of meeting local solid waste needs and protecting public health and the environment. The sections of the plan are ordered as listed in the General Statute.

Through implementation of this solid waste management plan, the Brunswick County planning area provides for solid waste management and reduction within the planning area from 2012-2022. This plan includes the planning area of all unincorporated areas of Brunswick County and the following municipalities located within the County: Bald Head Island, Belville, Boiling Spring Lakes, Bolivia, Calabash, Carolina Shores, Caswell Beach, Holden Beach, Leland, Navassa, Northwest, Oak Island, Ocean Isle Beach, Sandy Creek, Shallotte, Southport, St. James, Sunset Beach, and Varnamtown.

Brunswick County's long-range vision is for a comprehensive and cost-effective waste management program. This program would provide disposal capacity, waste collection services, and waste reduction programs to all members of the community. The vision includes the elimination of improper disposal of waste and expanded waste reduction opportunities that are convenient for residents. The vision is for a community that understands the environmental benefits of waste reduction and proper waste disposal. This vision is translated into five long-range planning goals listed below. These goals are listed in no particular order.

#### **Planning Area Goals**

Protect public health and the environment
Provide Brunswick County residents with waste disposal capacity, waste collection
services, and waste reduction opportunities
Meet or exceed the established local waste reduction goals
Eliminate improper waste disposal
Increase the efficiency and cost-effectiveness of the solid waste program

#### Part I. GEOGRAPHIC AND SOLID WASTE STREAM EVALUATION

#### Geographic Area

This solid waste management plan covers Brunswick County and its nineteen incorporated municipalities. A map of Brunswick County is provided in Appendix C. Most of Brunswick County's permanent residents live in unincorporated areas (see Table 1).

Table 1. Estimated Population, 2010

MUNICIPALITIES & COUNTY	POPULATION	PERCENT CHANGE FROM 1990
Bald Head Island	158	+103%
Belville	1936	+2833%
Boiling Spring Lakes	5,372	+226%
Bolivia	143	-37%
Calabash	1,786	+48%
Carolina Shores	3,048	+196%
Caswell Beach	398	+127%
Holden Beach	575	-8%
Leland	13,527	+651%
Navassa	1,505	+235%
Northwest	735	+10% (yr 2000)
Oak Island	6,783	+49%
Ocean Isle Beach	550	+5%
Sandy Creek	260	+7%
Shallotte	3,675	+281%
Southport	2,833	+20%
St. James	3,165	+294% (yr 2000)
Sunset Beach	3,572	+1049%
Varnamtown	541	+34%
Brunswick County – unincorporated areas	56,869	+66%
TOTAL	107,431	+111%

in the State of North Carolina. Brunswick County also has a distinct seasonal population. From late May through August, the Brunswick County Planning Department estimates that the peak population is 286,364 concentrated mostly in the beach areas.

Source: Office of State Planning Sources: 1980, 1990, 2000 & 2010 Census of Population • Ratio of peak season to permanent population is estimated at 2.3:1 • Yaupon Beach and Long Beach merged to form Oak Island on 7/1/99 • Town of St. James incorporated on 7/1/99 Based on percent increase from 1990 - 2010, Brunswick County is the third largest growing county The County of Brunswick provides curbside collection of household garbage for once a week pickup for all residents and businesses throughout the County including within municipal limits. The following municipalities provide additional curbside services: Bald Head Island, Calabash, Caswell Beach, Leland, Holden Beach, Oak Island, Ocean Isle Beach, Shallotte, Southport, St. James and Sunset Beach. The services provided by these municipalities may include recycling, yard waste collection, special collections and additional solid waste collection schedules to accommodate seasonal population fluctuations.

#### **Waste Stream Evaluation**

In this plan, residential/commercial waste refers to waste generated by households and businesses. Brunswick County and its municipalities disposed of approximately 90,916 tons of waste in FY 2011-2012. An estimate of the waste disposed by sector is shown in Table 2. These calculations are based on tonnage records from the Brunswick County Landfill scale house and estimates made by County staff. Figure 1 shows the percent of solid waste disposed by sector.

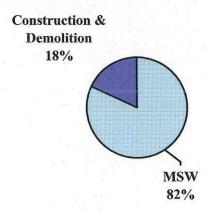
Table 2. Estimated Waste Disposed by Sector, FY 2011-2012

TYPE OF WASTE	TONS
MSW	74,386
Construction and Demolition	16,530
TOTAL	90,916

Source: Scale house records and staff estimates



Figure 1: Percent disposed by sector



#### Part II. LOCAL WASTE REDUCTION GOALS

Based on Brunswick County per capita waste disposal rates since fiscal year 1991-92, the planning area established a revised goal of 20% to be reached by June 30, 2018, and a goal of 25% to be reached by June 30, 2023. This is a challenging goal taking into consideration the growing population.

According to the North Carolina Solid Waste Management Annual Reports for FY1994-95 and FY1998-99, the per capita waste disposal for North Carolina increased 13% from 1.08 to 1.22. As shown in Table 3, the per capita waste disposal for Brunswick County decreased from FY1991-92 through FY1995-96 and increased from FY1996-97 through FY1999-00. This is similar to the overall trend in the recent State Annual Report. The increase in FY1996-97 through FY1999-00 was due to the severe damage Brunswick County experienced from hurricanes. For example, in FY1998-99, the Brunswick County Landfill recorded collecting 9,993 tons of material directly related to damage from hurricanes. If this tonnage is subtracted from the overall waste, the per capita disposal for FY1998-99 is 1.41, a 1.5% decrease from FY1991-92. Brunswick County greatly reduced its per capita in the years following the hurricanes. In FY2000-01 Brunswick County achieved a 20% waste reduction with a per capita of 1.19. While not maintaining the 20% reduction of the previous year Brunswick County still achieved a 9% waste reduction in FY2001-02 with a per capita of 1.34. Per capita waste disposal increased 8.97% from FY 2002-03 to FY 2003-04, and 5.7% from FY 2003-04 to FY 2004-05. This can be attributed to the increase in C & D debris from the building of new homes because of the influx of people into Brunswick County. FY 2005-2006 reflected a decrease in

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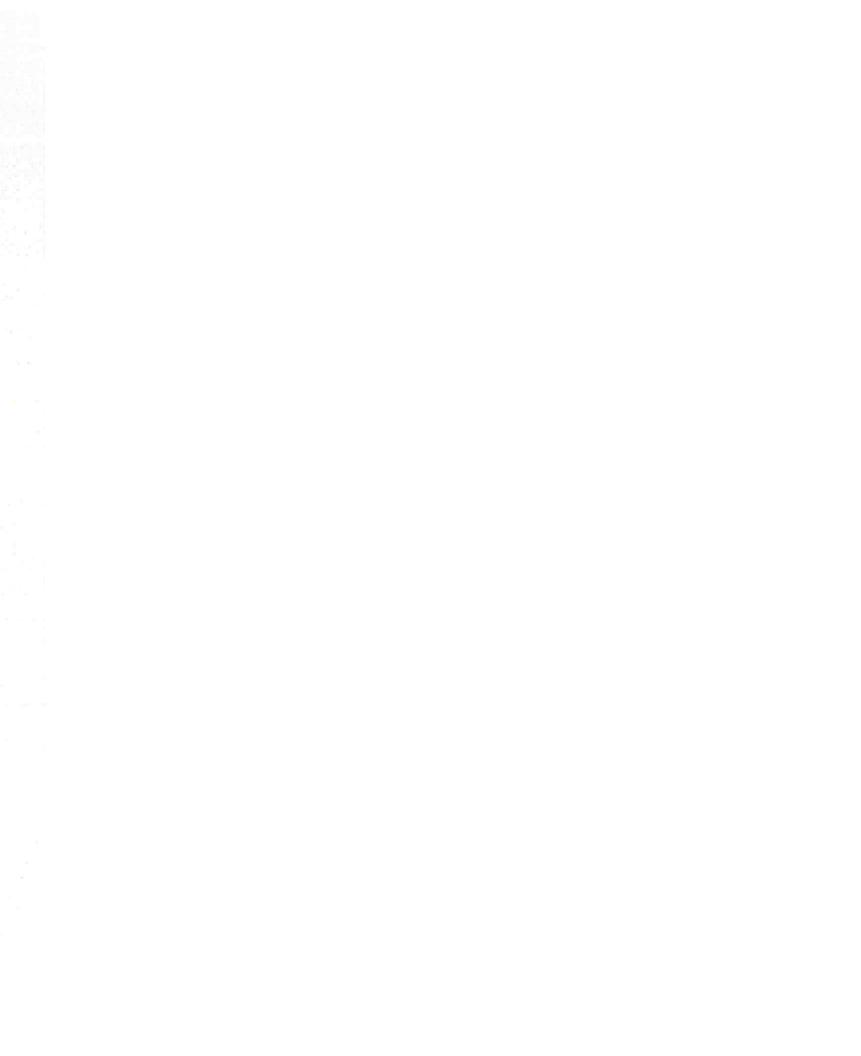
waste reduction of 32% with a per capita of 1.95. During FY 2006-07 Brunswick County experienced a 36% decrease in the waste reduction rate with a per capita of 2.01. Brunswick County experienced an increase in waste reduction during FY 2007-2008 compared to FY 2006-07 of 26% which would reflect a per capita of 1.48. This decrease was attributed to a decline in the economy. Brunswick County had an increase in waste reduction during FY 2008-2009 with a waste reduction rate of 22% with a per capita of 1.15. In FY 2009-10 Brunswick County's waste reduction rate increased to 36% with a per capita of .95. FY 2010-11 the waste reduction rate was 41% with a per capita of .88 and FY 2011-12 the reduction rate was 43% with a per capita of .84.

Table 3. Per Capita Disposal from FY 1991-92 through FY 2011-12

YEAR	POPULATION POPULATION	WASTE DISPOSAL	PER CAPITA WASTE DISPOSAL
FY 1991-92	53,614	78,123	1.48
FY 1992-93	56,896	82,785	1.45
FY 1993-94	58,029	76,005	1.31
FY 1994-95	59,202	79,917	1.35
FY 1995-96	60,795	83,117	1.37
FY 1996-97	62,856	88,775	1.41
FY 1997-98	67,341	97,873	1.45
FY 1998-99	69,700	108,579	1.56
FY1999-00	69,501	126,699	1.82
FY2000-01	73,143	87,059	1.19
FY 2001-02	76,904	103,367	1.34
FY 2002-03	79,054	114,532	1.45
FY 2003-04	81,810	129,221	1.58
FY 2004-05	85,034	141,661	1.67
FY 2005-06	88,287	172,387	1.95
FY 2006-07	93,874	188,573	2.01
FY 2007-08	99,440	147,630	1.48
FY 2008-09	103,160	118,319	1.15
FY 2009-10	107,062	101,407	.95
FY 2010-11	107,431	94,673	.88
FY 2011-12	108,505(estimated)	90,916	.84

Source: County Solid Waste Management Annual Reports

To meet the revised local goal of 20% per capita waste reduction in FY 2017-18 and 25% in FY 2022-23, Brunswick County must reduce its per capita disposal rate to 1.18 and 1.11 tons per capita respectively (see Table 4).

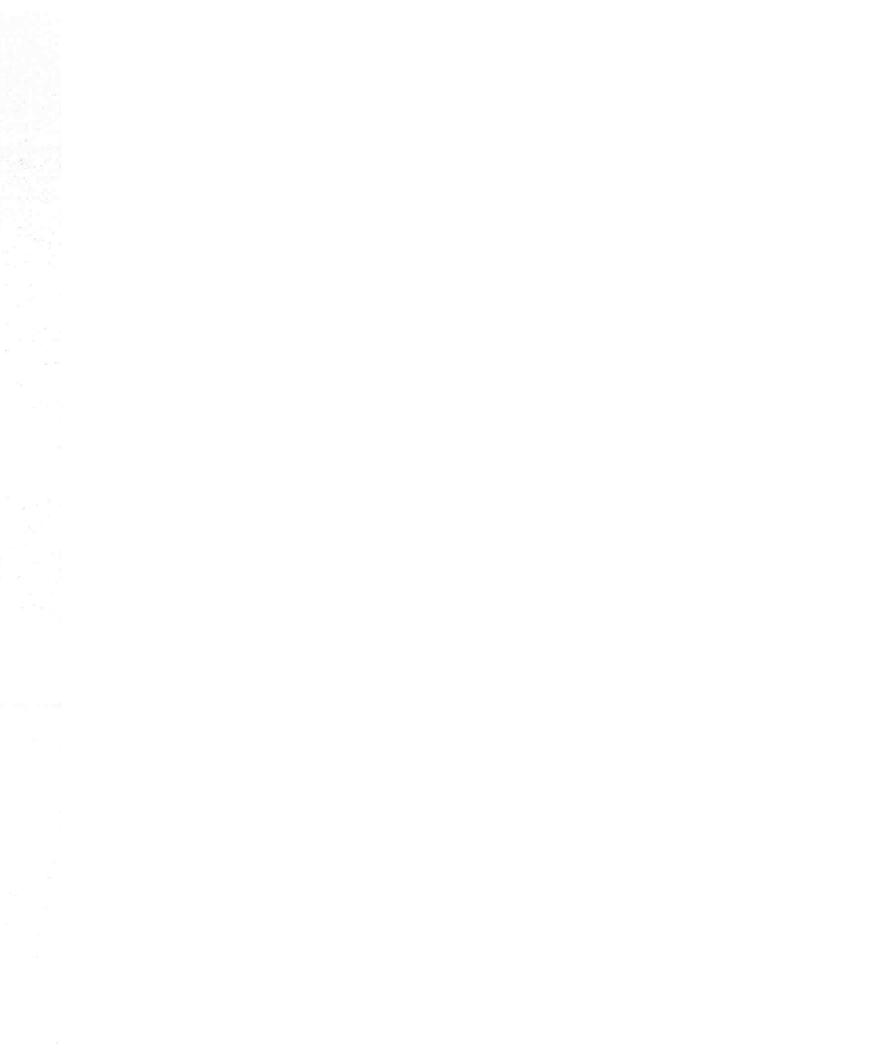


In the baseline year, fiscal year 1991-92, the disposal rate for Brunswick County was 1.48 tons per capita. If Brunswick County had a waste reduction goal of zero percent, with the projected population increase, Brunswick County would dispose 183,961 tons in FY 2017-18 and 208,135 tons in FY 2022-23 (see Table 4). Using the proposed reduced per capita disposal rates of 1.28 tons by FY 2017-18 and 1.23 tons by FY 2022-23, the annual tonnage remaining for disposal by Brunswick County would be 159,101 tons and 172,977 tons respectively. In other words, 24,860 tons of future annual waste disposed would be diverted from landfills in FY 2017-18 and 35,158 tons in FY 2022-23 (see Table 5).

Table 4. Targeted Waste Reduction, FY 2017-18 and FY 2022-23

CALCULATIONS	FY 2017-18	FY 2022-23
1) Baseline year (FY 1991-92) per capita disposal rate	1.48	1.48
2) Proposed solid waste reduction goals	20%	25%
3) Targeted per capita disposal rate based on waste reduction goals (subtract line 2 from 1.0, then multiply the result by line 1)	1.18	1.11
4) Projected population (County figure from US Census Bureau projections)	124,298	140,632
5) Projected annual tonnage for disposal at baseline per capita disposal rate (multiply line 1 by line 4)	183,961	208,135
6) Targeted annual tonnage for disposal at targeted per capita disposal rate (multiply line 3 by line 4)	146,672	156,102
7) Targeted annual tonnage to reduce (subtract line 6 from line 5)	37,289	52,033

Source: staff calculations



#### Part III. MEETING THE WASTE REDUCTION GOALS

This plan is designed to reduce Brunswick County's waste by 24,860 tons in FY 2017-18 and 35,158 tons in FY 2022-23. To do this, Brunswick County will target the types of waste generated as shown in Table 6. How these wastes will be targeted is addressed below. Detailed descriptions of specific waste reduction activities planned appear in Part V.

Table 5. Approximate Waste Reduction by Sector, FY 2017-18 and FY 2022-23

WASTE TYPE	TARGETED TONS to REDUCE in FY 2017-18	TARGETED TONS to REDUCE in FY 2022-23
Residential/Commercial	16,408	23,204
Construction/Demolition	8,452	11,954
GOAL	24,860	35,158

Source: staff estimates

#### Residential/Commercial Waste

This plan targets 16,408 tons in FY2017-18 and 23,204 tons in FY 2022-23 for reduction in residential and commercial waste. Table 6 summarizes the residential waste reduction methods to be used to meet the local goals. School and community education is not listed because they are expected to affect each of the other waste reduction methods listed. Specific activities planned are described in Part V.

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Table 6. Targeted Residential Waste Reduction, FY 2017-18 and FY 2022-23

REDUCTION METHOD	TARGETED MATERIALS	EST.TONS FY 2017-18	EST.TONS FY 2022-23
Source Reduction	Packaging, Disposable Drink and Food Containers	164	232
Cardboard, Newspaper, Mixed Paper, Junk Mail, Magazines, Steel Cans, Aluminum, Plastic 1 through 7, Glass, White Goods		5,743	8,121
Swap Shop	Furniture, Dishes, Appliances, Books and Magazines	656	928
Clothing	Clothes, Blankets (textiles)	164	232
LCID	Concrete, Brick, Asphalt	2,461	3,481
Carpet	Carpet, Carpet Padding	1,313	1,856
Electronics	Computer Equipment, Televisions, other electronic devices	820	1,160
Composting & Mulching	Yard Debris, Grass Clippings, Leaves, Pallets, and Clean Lumber	3,282	4,641
Special Wastes	Household Hazardous Waste, Used Oil, Used Antifreeze, Batteries, Fuel, Latex Paint	1,805	2,553
TOTAL		16,408	23,204

Source: staff estimates

#### **Construction and Demolition Waste**

It is estimated that construction and demolition waste can be reduced by 8,452 tons in FY2017-18, and 11,954 tons in FY 2022-23. The proposed reduction methods and targeted wastes are shown in Table 7.

Table 7. Targeted Construction and Demolition Waste Reduction, FY 2017-18 and FY 2022-23

REDUCTION METHOD	TARGETED MATERIALS	EST.TONS FY 2017-18	EST.TONS FY 2022-23
Reuse	Pallets, Wood	1,690	2,391
Recycling	Shingles, Cardboard, Packaging	4,226	5,977
Composting & Mulching	Pallets, Land Clearing, Untreated Wood	2,536	3,586
TOTAL	a a	8,452	11,954

Source: staff estimates

#### Part IV. THE PLANNING PROCESS AND PUBLIC PARTICIPATION

Brunswick County Solid Waste staff coordinated the update of this plan. Each municipality was contacted to receive updated information. The draft plan was distributed to all municipalities for review. The final revised plan was set on the agenda of the County and each municipality for adoption at a public meeting (see Appendix A).

#### Part V. SOLID WASTE MANAGEMENT METHODS: ASSESSMENT OF PROGRAMS

Each solid waste management method as required by North Carolina G.S. 130A-309.09A (b) is described below. Each section includes an assessment of the current program.

#### A. Source Reduction

*Current Program:* "Pre-cycle" Educate the public about the importance of purchasing items that have less packaging or recyclable packaging. The outreach for this program is targeted at the schools and civic groups.

#### B. Collection of Solid Waste

Current Program: On July 1, 1998, the County began contracting with Waste Industries to provide curbside collection of municipal solid waste (MSW) for all businesses and residents in Brunswick County, including within municipal limits. Each business and resident is offered one 96-gallon container for once a week collection, or an equivalent credit towards a dumpster (if service is provided by County contractor). The current cost is \$11.66 per container for the once a week

collection. Based on the annual report for FY 2011-12 the number of containers being serviced was approximately 78,201. The annual tonnage of MSW collected by Waste Industries for FY11-12 was approximately 75,443. This program is currently funded through the County General Tax Fund. The County has a contract with Waste Industries to staff the County convenience sites and to provide curbside garbage collection through June 30, 2019. At the end of this contract, the County will have to evaluate the program and consider additional options. As Table 9 shows, some municipalities provide additional solid waste collection programs to their residents.

Brunswick County owns one transfer station located at the Brunswick County C&D Landfill, and four convenience sites for solid waste collection. Employees from Waste Industries staff these sites. The transfer station is for business and residential use and the convenience sites are for residential use only. Collection fees are charged for waste brought to these sites as shown in Table 8. Collection fees at the convenience sites and MSW charges at the transfer station are kept by Waste Industries to cover the cost of solid waste disposal. The transfer station is open Monday through Saturday 8 a.m. to 4 p.m., and the four convenience sites located in Southport, Leland, Supply and Sunset Beach are open Monday, Wednesday, Friday and Saturday from 8 a.m. to 6 p.m. All the municipal solid waste collected curbside and at the convenience sites are required to go to the transfer station at the Brunswick County C&D Landfill in Bolivia.

Table 8. Brunswick County Collection Fees and Tipping Fees

TYPE OF MATERIAL	County Convenient Sites	Transfer Station	County C & D Landfill
Municipal Solid Waste – Regular bagged household trash.	<ul><li>\$2.00 per 1-20 gallon bag</li><li>\$3.00 per 21-40 gallon bag</li><li>\$4.00 per larger than 40 gallon bag</li></ul>	• \$56.00 per ton	
Brown Goods – Large items such as mattresses and old furniture.	<ul><li>\$8.00 per item</li><li>\$40.00 max charge for a pickup truckload</li></ul>	• \$56.00 per ton	
Construction and Demolition (C & D) Waste. Examples include treated wood, sheetrock, doors, windows, siding, and pipe.	<ul> <li>\$11.00 minimum</li> <li>\$16.00 for <sup>1</sup>/<sub>4</sub> truckload</li> <li>\$32.00 for <sup>1</sup>/<sub>2</sub> truckload</li> <li>\$48.00 for <sup>3</sup>/<sub>4</sub> truckload</li> <li>\$64.00 for full truckload</li> </ul>		• \$56.00 per ton
Shingles	Same prices as C & D Waste		• \$34.00 per ton
Asbestos	Not accepted at Convenient Sites	*	• \$56.00 per ton
Concrete, Brick, and Clean Soil	<ul> <li>\$11.00 minimum</li> <li>\$16.00for ¹/₄ truckload</li> <li>\$32.00 for ¹/₂ truckload</li> <li>\$48.00 for ³/₄ truckload</li> <li>\$64.00 for full truckload</li> </ul>		• \$ 7.00 per ton
Recycled Items - Aluminum and steel cans, mixed paper, junk mail, magazines, glass (green, clear, & brown), newspaper, and plastics #1 and #2.	Accepted free of charge.	**************************************	Accepted free of charge.
Corrugated Cardboard	Accepted free of charge.	e	Accepted free of charge.
Tires	Not accepted at Convenient Sites		Accepted free of charge from County individual with 5 or fewer tires or from County business with a valid scrap tire certification form.
White Goods (appliances)	Accepted free of charge.		Accepted free of charge.
Yard Debris – Untreated wood may be included in yard debris. No plastic bags or garbage bags are accepted in yard debris, paper bags or compost bags are acceptable.	<ul> <li>\$2.00 per 1-40 gallon bag</li> <li>\$3.00 per larger than 40 gallon bag</li> <li>\$6.00 for loose <sup>1</sup>/<sub>4</sub> truckload</li> <li>\$12.00 for loose <sup>1</sup>/<sub>2</sub> truckload</li> <li>\$18.00 for loose <sup>3</sup>/<sub>4</sub> truckload</li> <li>\$24.00 for loose full truckload</li> </ul>		• \$22.50 per ton
Mobile Homes – Mobile homes must be empty or stripped of all contents. Wheels and axles will not be returned to the owner.	Not accepted at Convenient Sites		• \$56.00 per ton *If mobile home cannot fit on the scale there will be a flat fee of \$ 250.00 per mobile home.
Rechargeable Batteries & Cell Phones	Accepted free of charge.	-	Accepted free of charge.



Table 9. Municipal Solid Waste Collection Program Information

Municipality	Contractor	Households Served	Service provided by Municipality in addition to County Program
Bald Head Island	Waste Industries	1,176	Second backdoor collection May - September, 40-yd manned drop-off site
Caswell Beach	Waste Industries	559	Second curbside collection  June - September
Holden Beach	Waste Industries	2,158	Second curbside collection June – September
Ocean Isle Beach	Waste Industries	2,892	Second curbside collection May-September, and a third collection June - August
Sunset Beach	Waste Industries	2,364 Added Condos	Second curbside collection (island only) May – September
Oak Island	Waste Industries	1,666	Second curbside collection May – September

Source: Waste Industries

#### C. Recycling and Reuse

Recycling

Current Program: Brunswick County has been working since 1998 to maintain a stable recycling program. Currently, the County is recycling about 19% of the residential waste. The amount collected by municipal and county recycling programs is listed in Table 10. The County transfer station and four convenience sites have drop-off recycling containers. The County has ten additional recycling drop-off sites at the County parks and the County Government Center. All County drop off sites were switched in March of 2000 to a commingled collection, allowing the additional materials of steel cans, magazines, mixed paper and junk mail to be added to the following materials: Mixed paper, plastics #1 through #7, aluminum cans, steel cans and glass (clear, brown, and green). There are also cardboard recycling containers at each convenience site as well as the transfer station. In addition to the drop off recycling program bi-weekly curbside recycling collection is available to all residents of Brunswick County for an annual fee. This program is contracted through Waste Industries and was implemented in FY 12-13. The current annual fee for the curbside collection is \$77.04 per individual household. This fee includes a blue 96 gallon roll out cart and bi-weekly collection.

Currently, Bald Head Island, Calabash, Carolina Shores, Holden Beach, Ocean Isle Beach, St. James, and Sunset Beach provide drop-off recycling centers for their residents. Caswell Beach, Leland, Oak Island, Shallotte, St. James and Southport provide curbside recycling collection. Ocean Isle Beach offers an optional biweekly curbside collection. Caswell Beach also provides a container for cardboard at their town hall. All of these recycling programs are contracted through Waste Industries. The municipal recycling programs accept the same materials as the County.

Brunswick County implemented collection fees in July of 1998, but recycling continues to be free to all residents and businesses. This is an incentive for businesses, industries, and residents to separate their recyclable materials. Waste Industries provides the drop off containers and hauls the collected material to a material recovery facility (MRF). This is part of the collection contract and there are no separate or additional costs. A lower tipping fee is charged for clean, untreated lumber to encourage the recycling of some construction debris. A cardboard bailer was added to the Transfer Station, and many cardboard recycling containers have been distributed to local businesses to target the reduction of residential/commercial waste.

Brunswick County has assisted the community college and all local schools in starting their own recycling programs. Brunswick County provides recycling for all public county schools. The Recycling Coordinator has made several presentations on the benefits of recycling at local schools and has given tours of the landfill to Environmental Biology students from the community college. The Solid Waste and Recycling staff has also set up booths at local events and fairs to distribute information on the recycling programs offered by the County.

Table 10: Residential Recycling in Tons, FY 2011-12

Material	County	Bald Head Island	Calabash	Carolina Shores	Caswell Beach	Leland	Holden Beach	Oak Island	Ocean Isle Beach	Shallotte	Southport	Total
White goods	1,117	=								=		1,117
Cardboard	816	_	= = =	25	X			_	-		2	841
Commingled materials	1,910	62		120	114	284	154	634	175	59	101	3,551
TOTAL	3,843	62		145	114	284	154	634	175	59	101	5,571

Source: Waste Industries

#### Reuse

*Current Program:* Several reuse programs such as consignment shops and thrift stores exist within Brunswick County. These stores accept and sell used clothing, household items, furniture, tools, jewelry, books, children's toys, and other items. Several examples of such stores are the Carousel Consignment Shop in Southport, Hope Chest (four stores throughout County), East Side Thrift Shop in Shallotte, Calabash EMS Thrift Shop, L. Bookworm in Holden Beach, and Sheltered Treasures in

Seaside. The County sponsors two clothes drives annually and donates the clothes to Hope Chest stores, which are associated with a local organization for battered women.

Brunswick County received a Solid Waste Assistance Grant in 2000 for the construction of a SWAP Shop. This shop is located at the County Transfer Station/ C&D Landfill. Residents are requested to bring other reusable or recyclable materials to exchange for items from the swap shop. This building is also used for the County's latex paint exchange program.

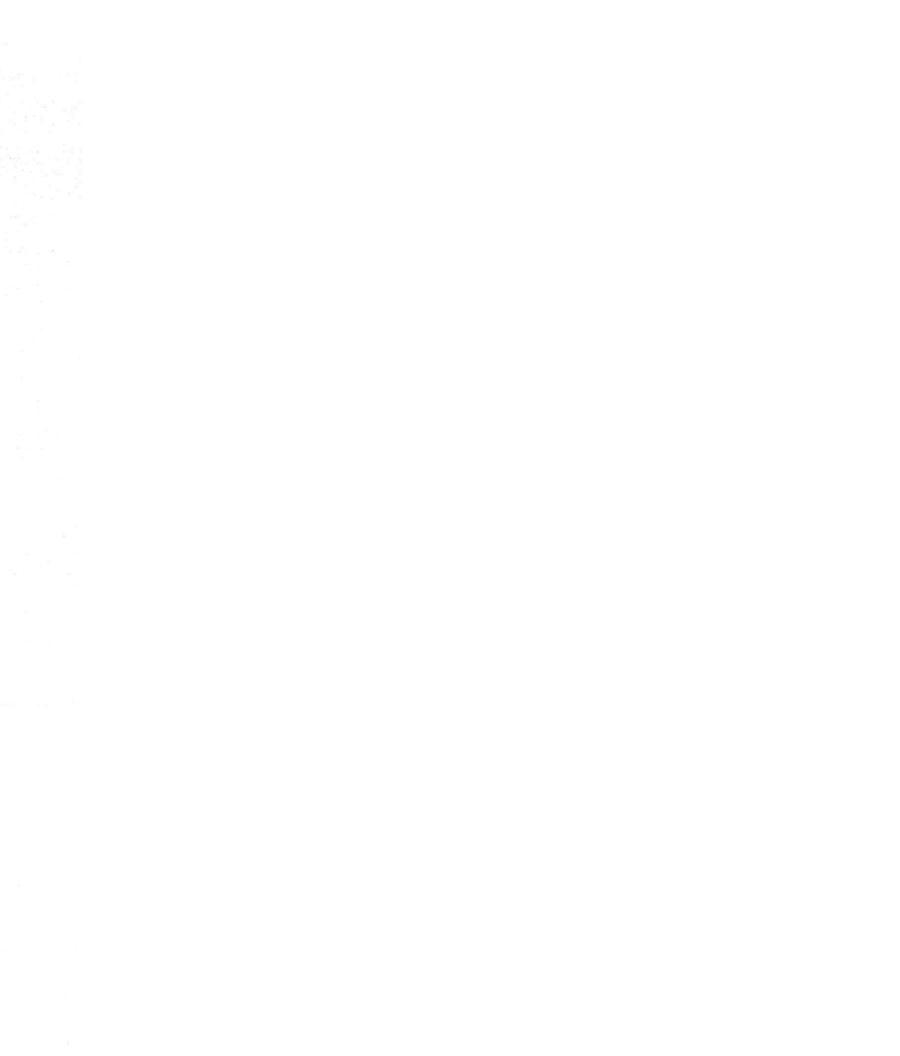
In 2011 Brunswick County received a Solid Waste Assistance Grant for the purchase of four buildings, one for each convenience site, to be used as a Book Exchange and Small Item Swap. Residents of Brunswick County may bring books, magazines and small household items to the conveniences sites and place them in the building for others to take. Books and items must be in usable condition.

#### D. Composting and Mulching

Composting

Current Program: In 1997, Cooperative Extension Service applied for a back yard composting grant for \$10,000. This grant was awarded to the City of Southport. The program started in 1998 and included training sessions, distribution of more than 250 composting bins, a follow-up survey, and two demonstration composting sites located in Southport and Oak Island. Cooperative Extension estimates that 750 cubic yards of landscape and garden waste was diverted from the waste stream with this program as of June 2000. Oak Island no longer has a demonstration site.

Brunswick County operates a permitted, Type 1, Solid Waste Compost Facility at the Brunswick County C & D Landfill. Residential yard waste is accepted at the Brunswick County C&D Landfill/ Transfer Station and all four convenience sites. Non-residential yard waste is accepted at the County C&D Landfill / Transfer Station only. Carolina Shores provides a drop-off collection container for yard waste collection for their residents. Leland provides a designated yard debris drop off area for residential use. Calabash provides curbside yard waste collection once a year and a drop-off collection site three times a year for their residents. Holden Beach, Oak Island, Ocean Isle Beach, Southport, St. James and Sunset Beach offer curbside yard waste collection for their residents. All yard waste collected is hauled to the County C&D Landfill / Transfer Station and stockpiled until there is sufficient quantity for grinding. Clean, untreated wood is also ground and mixed with the yard waste for resulting mulch. Grinding occurs approximately four times a year. In April 2001, the County Board of Commissioners approved a request to give mulch away to County residents until further notice. This was due to the large amount of mulch generated from disaster debris. As of November 2012, mulch is still free to County residents. As of June 2009 the contract for disaster debris was awarded to Unified Recovery Group, LLC for a term of three years. In 2012 the contract was extended for a period of 12 months. It is stated in this contract that the debris should be reduced as much as possible through means of air curtain incineration versus grinding or mulching.



#### E. Incineration with Energy Recovery

Current Program: The County currently does not have an incineration with energy recovery program.

#### F. Incineration without Energy Recovery

Current Program: Incineration is not part of the County's current program.

#### G. Transfer of Solid Waste Outside Geographic Area

Current Program: Brunswick County currently contracts with Waste Industries to haul all municipal solid waste from the County Transfer Station to a MSW landfill in Sampson County. It is approximately 86 miles from the County Transfer Station to Waste Industries' landfill in Sampson County. An estimated 75,443 tons of MSW was transferred in FY 11-12. It is also estimated that this approximate amount of waste will be transferred out of County each year until the contract with Waste Industries ends in 2019. At this point, the County will have to consider options for future waste disposal, such as continuing to transfer waste or any other viable disposal or recycling options available.

#### H. Disposal of Solid Waste

Current Program: All municipal solid waste is currently contracted with Waste Industries for disposal at a MSW landfill in Sampson County. The current contract with Waste Industries is valid through June 2019. To ensure adequate disposal for the future Brunswick County will continue to contract and transfer MSW out of County after June of 2019 or it will consider other disposal/recycling options available at that time. Refer back to Table 10 for costs of disposing at the Transfer Station, C&D Landfill or Convenience sites. The County has received an extension on the C&D permit that will extend the life of the landfill to adequately serve the needs of the community through March 28, 2014; given the C&D rules do not change. At this time, no waste is imported into the County and there are no plans to start importing waste. In the event of a natural disaster, certain sites have been selected and approved by the state for temporary storage of disaster debris.

#### I. Transfer of Construction and Demolition Debris Outside Geographic Area

*Current Program:* Brunswick County has contracted with Waste Industries for the transportation and disposal of up to 50% of the County's construction and demolition waste stream. In FY 11-12, 29% of the County's construction and demolition waste was transferred out of the County. This contract was implemented to extend the life of Brunswick County's current C&D landfill.

#### J. Disaster Debris Removal

Current Program: Brunswick County has contracted with Unified Recovery Group, LLC for disaster debris management services. This contract is valid through June 2013. For disaster debris removal of category 1 & 2 hurricanes, County residents are notified to place all disaster debris at roadside for collection. The contractors then collect the debris and transport to the County's Landfill/Transfer Station for disposal. For disaster debris removal of category 3, 4 & 5 hurricanes, Brunswick County selected possible staging areas for debris collection in addition to the normal procedure of collection and disposal. Brunswick County has several sites that have "conditional approval" from DENR as temporary debris storage areas. Unified Recovery Group, LLC will reduce the amount of debris via air curtain incinerator as much as possible and grind the remaining debris into mulch. A copy of the debris management contract with Unified Recovery Group is located in Appendix G.

## Part VI. EDUCATION, SPECIAL WASTES, ILLEGAL DISPOSAL, AND PURCHASING: ASSESSMENT OF PROGRAMS

#### A. Community and School Education

Current Program: Brunswick County Solid Waste & Recycling Staff coordinated a recycling education presentation in all of the local schools and instituted a school wide recycling program in those schools. Goodie bags containing items with recycling messages and Solid Waste and Recycling brochures were distributed to each student. Brunswick County Solid Waste & Recycling Staff offer the education/outreach program to any group or organization wishing to promote waste reduction. Staff also attends community events, festivals, and parades to distribute literature about recycling and proper waste disposal. Brunswick County regularly advertises in local papers for current programs regarding recycling, mulch, and special events. Recycling information is also advertised in the county telephone book. The County developed and distributed recycling brochures in 2001 and solid waste brochures in 2003. Both brochures are given to new residents and distributed at various public places throughout the County. The County also distributed litterbags to public places, such as gas stations, post offices, and libraries, in June 2001 and has continued this litter prevention/community awareness program.

#### **B.** Special Waste Management

Tires

Current Program: Tires are collected free of charge at the County C&D Landfill / Transfer Station for residents disposing of five or fewer tires at a time, or businesses with a scrap tire certification form. Tires are stored in an open top trailer and collected by Central Carolina Holdings, LLC two or three times per week. In addition, Central Carolina Holdings, LLC provides a trailer at the convenience site in Southport and at the Leland convenience site that is hauled off when full. Central Carolina Holdings, LLC is also contracted to clean up nuisance tire sites located in the County when necessary. Money from the statewide tire disposal tax pays for the majority of this program.

#### White Goods

Current Program: White goods are accepted at the Brunswick County C&D Landfill / Transfer Stations and all four convenience sites. All five locations accept the white goods free of charge from residents. The white goods collected at the four convenience centers are hauled to the Landfill by our waste hauler, Waste Industries. Waste Industries collects from each of the four sites on a weekly basis. Waste Industries will collect more often if needed. The white goods collected at the convenience centers are hauled to the main Landfill in Bolivia and are stored there on a concrete pad.

Brunswick County's contractor for processing and transporting of white goods is Foss Auto Recycling and Metals. Once the pad at the landfill is nearly full, the contractor is called; they have a minimum of thirty days to respond and remove all white goods. As per the white goods service agreement, Foss Auto Recycling and Metals is responsible for the removal of CFCs from all white goods collected at the landfill. The contractor also agrees to comply with all environmental laws, rules and regulations regarding CFC recovery and is certified by the EPA. After each processing and transporting job is completed, Foss Auto Recycling and Metals provides Brunswick County with a CFC manifest so that we can verify the number of appliances removed containing CFCs and the amount of CFCs removed.

#### **Electronics**

#### Current Program:

a. Brunswick County accepts electronics at the Brunswick County C&D Landfill / Transfer Station. Items included in this collection are computer equipment, office equipment, cell phones, power suppliers and chargers, televisions and other miscellaneous electronics. There is no charge to residents for this service. Electronics are stored in an open area on site until a collection is needed. When a collection is needed Brunswick County contacts the current contractor to schedule a pickup. Brunswick County's contractor for processing and transporting of electronics is Electronic Recyclers Int. They agree to pickup all electronics

within ten days of notification. Once ERI is in possession of the electronics they assume title to the electronics and all responsibility for the electronics. The contractor assumes liability for all applicable local, state and federal laws, including but not limited to transportation of electronics. ERI is R2 and e-Steward certified.

- b. Information on the electronics recycling program is distributed at events, festivals, and through the outreach and education program. Newspaper ads are placed periodically throughout the year. Information about the electronics recycling program is on the county website.
- c. Tonnage of equipment collected will be tracked by weighing the material as it leaves the collection site with the contracted electronic recycling company.
- d. The electronics recycling program is available to all Brunswick County residents. There is no additional charge to the residents for utilizing the program.
- e. Any funds received to support the electronics recycling program will be tracked by Brunswick County's finance/accountingdepartment. Expenditure of funds received will also be tracked by Brunswick County's finance/accounting department and by the solid waste/recycling department.

In 2010 Brunswick County built an enclosed area for the storage of collected electronics. This was made possible due to a grant awarded to Brunswick County from NCDENR. In 2012 Brunswick County purchased a semi-automated shrink wrap machine to be used when packing the electronics for shipment. This purchase was made possible by using the money granted through the Electronics Management Funds program.

#### **Batteries**

*Current Program:* The County coordinates a battery collection program at the Brunswick County C&D Landfill / Transfer Station. All batteries are accepted at this location. The batteries are then collected by Foss Auto Recycling and Metal.

#### Used Motor Oil, Oil Filters and Gasoline

*Current Program:* The County currently has containers for used oil, oil filters, used antifreeze and gasoline located at the Brunswick County C&D Landfill / Transfer Station. Residents of Brunswick County may also take their used motor oil to the Advance Auto Parts in Shallotte or Southport.

The Town of Carolina Shores has a container for the collection of used oil. The Town of Oak Island has constructed and is using an oil and oil filter recycling facility.

#### Household Hazardous Waste

Current Program: The County hosted a household hazardous waste collection day in the fall of 1999. This program was funded by the State as part of a Disaster Response Program. Spring of 2000, Brunswick County sponsored its first HHW collection day. The collection was held on Earth



Day, and was located at the Brunswick County C&D Landfill/Transfer Station. The County now sponsors two HHW events annually. The spring HHW event is held at Shallotte Middle School in April, and the fall HHW event is held at South Brunswick Middle School in Boiling Spring Lakes in September.

Septic Waste

*Current Program:* Septic waste is handled by private contractors that use permitted land application disposal sites within the County. The County and municipalities have no facilities or disposal methods for septic waste.

#### Mobile Homes

Current Program: Brunswick County has a program for the management of abandoned manufactured homes. If a mobile home is damaged or dilapidated to the point that it will require more than 50% of the value of the mobile home to make the needed repairs the mobile home is declared abandoned and dilapidated. The County's code enforcement department has the authority to make this decision. Brunswick County takes a proactive approach in locating abandoned-dilapidated mobile homes. These homes are also brought to the County's attention through community complaints and owners of mobile homes who contact Brunswick County to request an inspection on their mobile home to determine whether or not it qualifies as dilapidated. Once a mobile home has been deemed abandoned/dilapidated by the code enforcement department they notify the responsible party of the decision and inform them that they have 90 days to properly dispose of the abandoned/dilapidated home. The property owner is responsible for all costs of disposal. The property owner is notified that a hearing date will be set for the end of that 90 day period. After the hearing, if the said property is determined abandoned/dilapidated, the responsible party must proceed with disposing of the mobile home. If the owner fails to take proper action Brunswick County may proceed with the removal of the abandoned/dilapidated mobile home.

Abandoned/dilapidated mobile homes removed by the county are disassembled and all recyclable material, such as the metal frame and appliances, are placed into the County's recycling stream. All hazardous material, such as mercury switches, are removed and disposed of through a certified hazardous materials disposal company. The remaining material is taken to the County's C&D Landfill for disposal. The property owner is billed for these services and the County may take legal action to collect for these services.

#### C. Prevention of Illegal Disposal and Management of Litter

Illegal Disposal

*Current Program:* Brunswick County employs one Solid Waste Officer who investigates and prosecutes (when possible) incidences of illegal disposal. When tipping fees were implemented in July of 1998, there were concerns that illegal dumping would increase. To help deter this dumping,

the County sponsors a week in the spring and a week in the fall when residents can dispose of items other than their regular household or yard waste at no charge. The Solid Waste Officer also performs regular surveys of specific roads and/or areas known for illegal dumping.

#### Litter Management

Current Program: Curbside collection has decreased the litter on the sides of the roads because there is less garbage being transferred by fewer people. Brunswick County has also established a locally managed version of the state Swat-a-Litterbug program. Residents who witness an incident of littering may call 253-2648, which spells "CLEAN IT" to report the license tag number of the vehicle seen littering. This number has been advertised in local newspapers, on road signs and on Keep America Beautiful litterbags that are distributed throughout the County. Offenders receive letters addressed from Brunswick County Solid Waste Officer informing them that they were spotted and reported littering. The letter also informs the violator of the penalties for littering and urges them not to repeat the offense. The Solid Waste Officer continues to monitor and educate the public regarding ordinances on covering loads. Brunswick County also participates in Big Sweep and Litter Sweep every year.

#### D. Purchase of Recycled Materials and Products

Current Program: No buy recycled product program is in place at this time.

The Brunswick County government complex purchases recycled paper for their copiers and printers. Some departments also purchase their letter head paper with recycled content. The Solid Waste Department purchases items with recycled content to distribute to the public in order to increase public awareness of recycling. For example, the Solid Waste department has purchased pencils, pens, yoyos and tops made from recycled material with the County logo and recycle message printed on them.

#### Part VII. SOLID WASTE COSTS AND FINANCING METHODS

#### **Description and Assessment of Costs:**

#### County Description:

Brunswick County contracts to provide curbside garbage collection for all businesses and residents within the County, including within municipal limits. The County contracts this service at a rate of \$11.66 per household per month as of FY 11-12. This contracted price includes the collection of the garbage, transfer of the waste to the landfill in Sampson County and the disposal of the waste. The contracted price also includes the staffing of the four County convenience sites and one Transfer

Station. The County is currently paying for approximately 78,225 services.

Brunswick County also operates the C&D Landfill. This includes the acceptance and maintenance of items for the SWAP shop, white goods, tires, land clearing and inert debris, used oil, used antifreeze, fuel, latex paint, lead-acid batteries, yard waste, LCID, carpet and electronics.

A summary of the County-operated solid waste program costs is shown in Table 11. These totals are derived from the full cost accounting section of the FY 11-12 annual report.

Table 11. Solid Waste Program Costs, FY 11-12

	Total	Solid Waste Collection/Disposal/ Recycling	Mulching/Composting /Other Programs
Program Cost	\$11,873,432.60	6	\$99,820.98
Cost per Household	\$152		
Cost per Ton	\$132 w/recycling	\$131.72	\$14.30

Source: Brunswick County Solid Waste Annual Report FY 11-12

#### Municipalities Description:

#### Bald Head Island

The Village of Bald Head Island provides backdoor service for collection of a thirty-gallon container for their residents. Bald Head Island utilizes County credit to help fund this service and between May and September, a second weekly collection is provided. Bald Head Island also provides a drop-off container for excess garbage, a 40 yard container for cardboard and a 40 yard container for white goods. The County provides a commingled container for recycling. Bald Head Island employees staff the drop-off site during the week from 11a.m. - 2 p.m. Waste Industries is contracted for the curbside collection as well as removal of waste and recyclable materials from the island. Bald Head Island provided these additional services for 1,300 properties and has budgeted \$298,557.00 for these services in FY 12-13.

#### Belville

The Town of Belville does not provide any solid waste services for their residents as of FY 11-12. The only fees associated with Solid Waste are for the disposal of the Town Hall's waste.

#### Boiling Spring Lakes

Boiling Spring Lakes does not provide any solid waste services for their municipality as of FY 11-12.

#### Bolivia

Bolivia does not provide any solid waste services for their municipality as of FY 11-12.

e e		

#### Calabash

The Town of Calabash currently provides a drop-off site for yard waste to their residents. The site is currently open Monday mornings from 8.00 am - 12.00 pm and Wednesday and Friday afternoons from 1.00 pm - 4.00 pm. The Town of Calabash offers curbside pick-up for yard waste once a month starting on the Monday of the first full week of the month. Residents are asked to place leaves, pine needles and grass clippings in clear plastic bags; limbs should be cut into 4-foot lengths and set in manageable piles, both should be placed at the curb (pick-up takes place Monday-Friday the first full week of the month). Calabash also provides its residents with a year round drop-off site for recyclable materials. In FY 11-12 Calabash serviced households.

#### Carolina Shores

Carolina Shores provides a drop-off center for solid waste, yard waste, used oil, and recyclable collection for approximately 1,981 households. The town does not participate in the County curbside garbage collection program, but receives funding from the County to operate the collection of solid waste. In FY 11-12, the town spent \$73,654 and managed 807 tons.

#### Caswell Beach

The Town of Caswell Beach provides a second curbside solid waste and recycling collection during the summer months for the single family residences along Caswell Beach Road and the multi-family areas only. Caswell Beach also provides curbside recycling collection for residents throughout the year, and a drop-off container for cardboard at the town hall. During the summer season (June – August), property owners of residences along Caswell Beach Road and in the Caswell Dunes condominiums can also opt for a "roll-back" service whereby the trashcan will be rolled back to the house after collection for an additional fee. Caswell Beach also provides a free yard waste pickup (announced annually in the Spring and Fall). In FY 11-12, Caswell Beach managed 109 tons of recyclables and spent \$17,308.00 on the recycling program.

#### Holden Beach

The Town of Holden Beach provides a second curbside solid waste collection and curbside yard waste collection for approximately 2,158 households. Holden Beach also provides a drop-off recycling center for town residents. In FY 11-12 the town paid \$88,615.28 for these services.

#### Leland

Leland provided a weekly curbside collection of commingled recycling and a drop off site for residential yard debris in FY 11-12. The recycling program started in February 2009 as a weekly program with 18 gallon bins. In October 2012 the program was revised to bi-weekly collection using 96 gallon carts. They serviced 6,340 residential units at a cost of \$318,825 for recycling and \$14,526 for yard debris. In FY 11-12 they collected 197 tons of yard debris.

#### Oak Island

Oak Island provides a second weekly curbside garbage collection during the summer. The Town also provides special curbside collections of yard debris, white goods, brown goods, and recyclables. In FY 11-12, the Town provided these services for 8,049 households at a cost of \$991,000.00.

#### Navassa

The Town of Navassa does not provide any solid waste services for their residents as of FY 11-12.

#### Northwest

The Town of Northwest does not provide any solid waste service for their residents as of FY 11-12.

#### Ocean Isle Beach

The Town of Ocean Isle Beach provided additional curbside solid waste collection and yard waste pick-up for 3,200 households in FY 11-12. Effective November, 2012 Ocean Isle Beach offers optional curbside recycling service with biweekly pickup provided by Waste Industries and also continues to maintain a drop-off recycling site for these households. Ocean Isle expended \$229,100 on these programs in FY 11-12.

#### Sandy Creek

Sandy Creek currently provides a 40 yard recycling container for residents. The container is located at Town Hall. This service is contract through Waste Industries.

#### Shallotte

The Town of Shallotte provides curbside recycling collection for 1079 households. Shallotte has switched from the 20 gallon totes to the 96 gallon roll out cart. Recycling is picked up bi-weekly. Shallotte budgeted \$46,200.00 for FY 12-13 to provide this contracted service.

#### Southport

Southport provided curbside yard waste collection and biweekly recycling services for 1,589 households in FY 11-12 for a cost of \$126,500.00.

#### St. James

St. James provides a centralized cardboard recycling container for their residents. The Town also contracts with Waste Industries for weekly curbside recycling service. This service was provided to 2270 households at a cost of \$64,000 in FY 2011-12. A container is centralized for collection of aluminum cans where proceeds from the sale of aluminum go to local charities. The town also provides weekly residential yard waste collection services. In FY 2011-12 this service was provided at a cost of \$86,026.

#### Sunset Beach

Sunset Beach provides a second curbside solid waste collection from May – September for town residents who live on the island or reside in Sea Trail. This service is provided to 2,364 households. The town also provides curbside yard waste collection container for residents. The town has a curbside recycling program that services 573 households.

#### Varnamtown

Varnamtown does not provide solid waste services to their residents as of FY 11-12.

#### **Description of Financing Methods:**

The current Brunswick County solid waste management program is funded through the general tax fund and from tipping fees. Part of the costs for white goods and scrap tires are paid for through the taxes levied by the state.

#### **Assessment of Financing Methods:**

County Assessment: The majority of the County's solid waste management program is funded from the general tax fund. However, this program is now supported by the collection of tipping fees. With the rapid growth of Brunswick County, it was known that it would be difficult to fund the current program through the general tax fund. Each year, the budget is evaluated and household charges are considered to help support the program.

The County recognizes that the revenue received from state tax reimbursements may soon change. When this happens, the County will be responsible for funding the management of these materials on its own.

## Part VIII. FACILITIES AND RESOURCES AVAILABLE THROUGH PRIVATE ENTERPRISE

Brunswick County and all municipalities use privately operated companies for hauling solid waste and collecting recyclables. Brunswick County operates a C&D Landfill, but uses a privately operated disposal facility. Private consultants are often used as well. In addition, the county contracts with private companies to provide services such as grinding yard waste and tire collection. Brunswick County uses a combination of publicly and privately operated programs and anticipates this will continue.



## Appendix A

Resolutions from all Participating Entities

# Country of Brunswick Office of the Country Commissioners



# RESOLUTION ACCEPTING AND ENDORSING THE SOLID WASTE MANAGEMENT PLAN OF 2022 FOR BRUNSWICK COUNTY

**WHEREAS**, it is a priority of this community to protect human health and the environment through safe and effective management of municipal solid waste;

**WHEREAS**, the reduction of the amount and toxicity of the local waste stream is a goal of this community;

**WHEREAS**, equitable and efficient delivery of solid waste management services is an essential characteristic of the local solid waste management system;

**WHEREAS**, it is a goal of the community to maintain and improve its physical appearance and to reduce the adverse effects of illegal disposal and littering;

**WHEREAS**, Brunswick County recognizes its role in the encouragement of recycling markets by purchasing recycled products;

**WHEREAS**, involvement and education of the citizenry is critical to the establishment of an effective local solid waste program;

**WHEREAS**, the State of North Carolina has placed planning responsibility on local government for the management of solid waste;

**WHEREAS**, NC General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to update the Ten Year Comprehensive Solid Waste Management Plan at least every three years;

WHEREAS, the Brunswick County Solid Waste Department has undertaken and completed a long-range planning effort to evaluate the appropriate technologies and strategies available to manage solid waste effectively;

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF Brunswick County,

That Brunswick County's 2022 Ten Year Comprehensive Solid Waste Management Plan is accepted and endorsed and placed on file with the Clerk to the Board on this the 17th day of December, 2012.

TTEST:

Deborah S. Gore, NCCC Clerk to the Board

-100

nensive Solid Waste Management Plan is Clerk to the Board on this the 17th day of Phi Nordis, Chairman Imswick County Commissioners

Municipality resolutions will be submitted upon receipt

# Appendix B

Copy of Notice for Public Meeting



The Brunswick County Board of Commissioners will conduct a Public Hearing on Monday, December 17, 2012, at 6:30 PM, or as soon thereafter as the matter can be reached, in the Commissionsoon thereafter as the matter can be reached, in the Commissioners' Chambers of the David R. Sandifer Administration Building, 30 Government Center Drive, at the Brunswick County Government Complex near Bolivia, NC, on the Adoption of a Three-Year Update to the Brunswick County Solid Waste Management Plan. This notice is provided pursuant to NC General Statute 130A-309.09A(b). The updated Solid Waste Management Plan may be viewed at the Office of the Clerk to the Board of the Brunswick County Commissioners and at all five County libraries.

The purpose of the Public Hearing is to inform the public of the updated Solid Waste Management Plan and provide the public with an opportunity to ask questions and gain understanding of the proposed waste management activities.

proposed waste management activities.

All citizens are encouraged to attend the Public Hearing and learn of the County's plans and ask questions and make comments if needed.

Deborah S. (Debby) Gore Clerk to the Brunswick Board of Commissioners

(12-5)



PUBLIC HEARING

The Brunswick County Board of Commissioners will conduct a Public Hearing on Monday, December 17, 2012 at 6:30 PM, or as soon thereafter as the matter can be reached, in the Commissioners' Chambers of the David R. Sandifer Administration Building, 30 Government Center Drive, at the Brunswick County Government Center Brunswick County Government Center Drive, at the Brunswick County Government Plan. This notice is provided pursuant to NC General Statue 130A-309.09A(b). The updated Solid Waste Management Plan may be viewed at the Office of the Clerk to the Board of the Brunswick County Commissioners and at all five County libraries.

The purpose of the Public Hearing is to inform the public of the updated Solid Waste Management Plan and provide the public with an opportunity to ask questions and gain understanding of the proposed waste management activities.

All citizens are encouraged to attend the Public Hearing and learn of the County's plan and ask questions and make comments if needed.

Deborah S (Debby) Gore Clerk to the Brunswick Board of Commissioners

### Appendix C

Map of Facilities and Disposal Sites

# **BRUNSWICK COUNTY** SOLID WASTE FACILITIES



#### Legend

#### **County Facilities**

- CONVENIENCE CENTERS
- **LANDFILL**

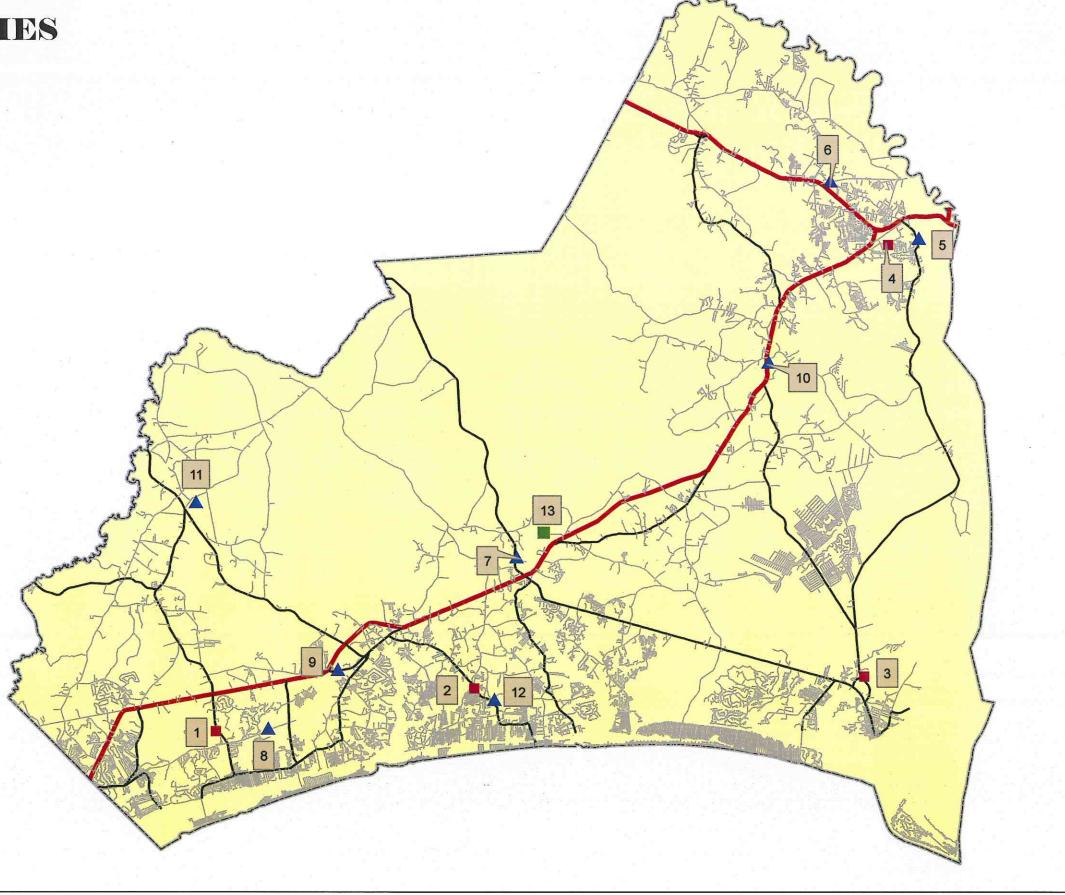
A RECYCLING CENTERS

County Outline

- 736 Seaside Rd.
   1709 Oxpen Rd.

- 1709 Oxpen Rd.
   8392 River Rd.
   9921 Chappell Loop Rd.
   580 River Rd.
   1490 Village Rd.
   430 Green Swamp Rd.
   6483 Old Georgetown Rd.
   5550 Main St.

- 10. 6420 Ocean Hwy. E. 11. 5855 Waccamaw School Rd. 12. 1691 Stanbury Rd.
- 13. 172 Landfill Rd.,

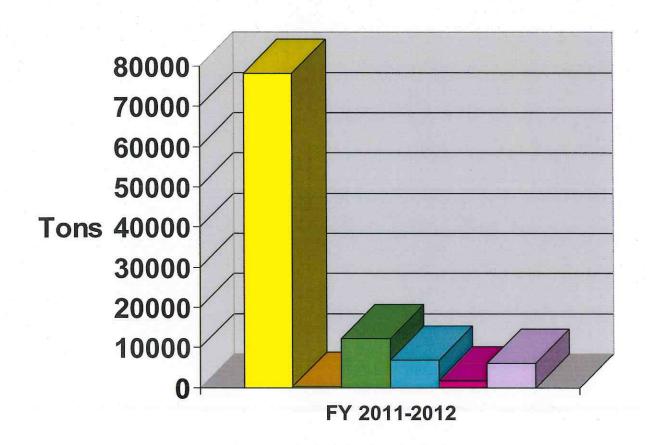


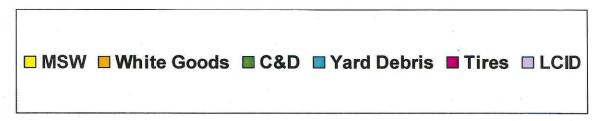


### Appendix D

Waste Characterization Chart

# Brunswick County FY 2011-2012 Waste Characterization Chart





### Appendix E

Waste Reduction Goal Sheet

#### WASTE REDUCTION GOAL SHEET N.C. LOCAL GOVERNMENT TEN YEAR SOLID WASTE MANAGEMENT PLAN

Local government name: County of Brunswick
Previously established FY 2013-2014 waste reduction goal 12%
After considering your government's current and projected solid waste activities, resources, population and economic growth, will the FY 2013-2014 waste reduction goal change? Yes If Yes, what is the revised FY 2017-2018 waste reduction goal? 20%
Establish a new FY 2022-23 waste reduction goal: 25%

#### WASTE REDUCTION CALCULATIONS

To provide 10 years of solid waste management planning, as per General Statute 130A-309.09A(b), waste reduction goals are updated. Use the following chart to determine the tonnages needed to manage, without land filling, to meet waste reduction goals for FY 2022-23.

CALCULATIONS	FY 2017-18	FY 2022-23
1) Baseline year (FY 1991-92) per capita disposal rate	1.48	1.48
2) Proposed solid waste reduction goals	20%	25%
3) Targeted per capita disposal rate based on waste reduction goals (subtract line 2 from 1.0, then multiply the result by line 1)	1.18	1.11
4) Projected population (County figure from US Census Bureau projections)	124,298	140,632
5) Projected annual tonnage for disposal at baseline per capita disposal rate (multiply line 1 by line 4)	183,961	208,135
6) Targeted annual tonnage for disposal at targeted per capita disposal rate (multiply line 3 by line 4)	146,672	156,102
7) Targeted annual tonnage to reduce (subtract line 6 from line 5)	37,289	52,033

### Appendix F

Planning Element Sheets

Reduction

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	9 2	INCOMPLETE?	= 1 = =	DUE	DIVERTED IN 10 <sup>TH</sup>
	·		-		YEAR
Set up a book	Source reduction	Lack personnel	Implement a	June	10 tons/year
swap and small	program with	needed to accomplish this goal.	collection of leftover	2016	
item exchange	major companies	decempner and godi.	food from the beach		
program at each	- p	_11 -	rentals and donate		
convenience site.	Encourage school	Lack personnel	it to food pantries.	-	, i a
	program of non-	needed to accomplish this goal.			-
	disposable food &	accompliant and goal		3	
Expand the Item	drink containers.		Encourage school	June	10 tons/year
Swap building at		6	program of non-	2016	, o tono, jour
the landfill to	Encourage offer	Lack personnel	disposable food &		a s
accommodate a	vs. serve program	needed to	drink containers.		
paint exchange	at County Schools.	accomplish this goal.			
program.			Source reduction	June	30 tons/year
	Implement a	Lack personnel and	program with major	2016	
	collection of	funding needed to	companies.		
	leftover food from	accomplish this goal.			
	the beach rentals		Bring back the	June	
and donate it to	and donate it to		recycling show to	2016	
	food pantries.	, ,	primary and		
			elementary schools.		
	rood parities.	, ,			



Collection

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 <sup>TH</sup> YEAR
Eliminate unmanned collection sites for	Add 8 manned collection sites.	Changed collection program to curbside collection.		*	- 27
solid waste.	=				
collection fees at the four Conv. Sites	_ * * .	*		E 65	2 27 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
and at the C&D landfill/Transfer	, , , , , , , , , , , , , , , , , , ,	,	-		
station to discourage out of County waste.	5 V 5 5				
Extend the		/ 	-		-
collection contract for MSW through June 30, 2019.					
			=		
	-	*		_	v
	8		- -		



Recycling & Reuse

COMPLETED	INCOMPLETE	11	NEW/REVISED		
ACTIONS	ACTIONS		ACTIONS	, -	a P + _ =
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	3.—1. 1.1=.1.1=.1.1=	- NAME OF		DUE	DIVERTED IN 10 <sup>TH</sup>
		INCOMPLETE?	=	DUE	4
					YEAR
Added 8 new recycling	Add 8 manned	The new	1.		1 2 0
centers to the	recycling	convenience sites	Implement the	June	N/A
County's public parks.	collection sites at	were not built	Business Recyclers	2016	
N 11,000 MI	new convenience	because the Solid	Award.		
Started a	sites.	Waste program	2.2		
rechargeable battery		changed to curbside	Implement a school	Sept.	N/A
and cell phone	Implement the	collection.	recycling poster	2016	
recycling program.	Business	<	contest.		2
,	Recyclers Award.	Lack the personnel		V	
Started a Swap Shop		needed to			
at the County's	Bald Head Island	accomplish this goal.	-		81
Landfill.	Blue Bag recycling		I	I	
	program.		7		
Added collection of	p 3				
cardboard to the		V = **	r v -	li li	= = = n
recycling centers at		Program changed			
the county's conv.		when the County	n = 1	_	
Sites and Landfill.		started providing			
		curbside collection.			
Switched all recycling		00.20.00			
centers to commingled		<u>.</u>			
containers.				(4V)	
corremiers.	= 1		_		*
Increased plastic		-			
recycling collection to			8		
include plastics #1					
through #7.	."		,		
anoagn					
Implement a	,				
commingled recycling				1	
program in all					
Brunswick County	-	1			920
Schools.					
O010010.					
Establish a year round					
electronics collection				-	it.
site.					ll ll
SILO.			×		
					1
		1			1



Composting and Mulching

COMPLETED	INCOMPLETE		NEW/REVISED		
ACTIONS	ACTIONS		ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	-	INCOMPLETE?		DUE	DIVERTED IN 10 <sup>TH</sup>
200	r				YEAR
At the Landfill untreated lumber is now combined with yard debris for mulching.  Calabash started a curbside collection of yard	Set up a permanent compost demonstration site in conjunction with Cooperative Extension Department.	May consider this for future programming, but there is currently a lack of interest and personnel to accomplish this goal.			
debris once per year and a drop off site three times per year.	Raffle off back yard composting bins.	Lack of funding needed to accomplish this goal.	- Ty .		
Long Beach implemented a curbside collection of yard debris.	Encourage large generators of wood to grind or mulch on site.  Give composting	Lack personnel needed to accomplish this goal.  Lack of funding.			
Implement a composting program at two Brunswick County Schools.	bins and composting instructions to 100 Brunswick County Residents.			21	

Incineration with Energy recovery

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		a " w
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
		INCOMPLETE?		DUE	DIVERTED IN 10 <sup>TH</sup>
		= 0			YEAR
None	None		None	360	, %
	. 2	P 2 = -		20	
	- , =				8 " " "
9- 					= =
		e a			
	a		-	= = =	A 2

Incineration without Energy recovery

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 <sup>TH</sup> YEAR
None	None	_ V	None		
	*	* _			-
				π	
	- =			-	x .

Disposal

COMPLETED	INCOMPLETE	= (	NEW/REVISED		
ACTIONS	ACTIONS		ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	A	INCOMPLETE?	= =	DUE	DIVERTED IN 10 <sup>TH</sup>
-		:50			YEAR
Obtained a permit for a C&D Landfill  Extended C&D permit and landfill area.  Constructed a transfer station.	er:		Continue using Transfer Station until the end of the contract with Waste Industries. Evaluate options prior to ending contract.	2019	

Education with the Community and Through Schools

COMPLETED	INCOMPLETE		NEW/REVISED		
ACTIONS	ACTIONS		ACTIONS	18	
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
		INCOMPLETE?		DUE	DIVERTED IN 10 <sup>TH</sup>
		ý.			YEAR
Visit schools upon request for recycling education. Give tours of Landfill	Set up a demonstration site for educational purposes.	Lack of resources necessary to accomplish this goal.	Set up a demonstration site for educational purposes.	June 2016	
upon request.  Created new recycling			Visit more schools for recycling education.	June 2016	
brochure with all County recycling programs.			Obtain a bus and convert it to a mobile recycling education unit for	June 2016	
Created new Solid Waste brochure.			the schools and community events.		
Begin a vermicomposting program at 2 elementary schools in the county and educate students		2			
of the benefits of composting.					
Attend community events and festivals to distribute educational material.		8 (	W =	-	. *

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#### **PLANNING ELEMENTS**

### NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN Circle appropriate element PLANNING YEARS 2012 through 2022

Special Waste

COMPLETED	INCOMPLETE		NEW/REVISED	Α	
ACTIONS	ACTIONS		ACTIONS	`	
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	# #8	INCOMPLETE?	E	DUE	DIVERTED IN 10 <sup>TH</sup>
					YEAR
Set up a program with Interstate	Construct shelter for tire trailer.	Lack of funding needed to complete	Construct shelter for tire trailer.	June 2016	
Batteries to collect lead-acid batteries at the Landfill.		this goal.	Advertise the HHW collections more so that there is greater participation.	April 2014	
Started used oil and antifreeze collection.	- ,				
Hold bi-annual HHW Collection Days.					ź
Started a rechargeable battery and cell phone recycling program.			-		
Start a latex paint collection.					1
Start a collection for old fuel.		E 30			
Establish a year round electronics collection site.		H . A			
Begin a carpet recycling program.					
Build shelter for the collection of electronics.	×		-		



Illegal Disposal/Litter

COMPLETED	INCOMPLETE		NEW/REVISED		
ACTIONS	ACTIONS		ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	- ,	INCOMPLETE?		DUE	DIVERTED IN 10 <sup>TH</sup>
					YEAR
Periodically re- advertise the "CLEAN-IT" number in local papers.  Develop a more stringent Solid Waste Management Ordinance.  Give presentations to schools and civic groups regarding the dangers and other negative effects of littering.	Send out invitations to organizations for Adopt-a-Highway programs.	Lack of personnel needed to accomplish this goal.	Send out invitations to organizations for Adopt-a-Highway programs.	June 2016	



Purchasing Recycled Products

COMPLETED	INCOMPLETE		NEW/REVISED		=
ACTIONS	ACTIONS		ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
	-	INCOMPLETE?	æ	DUE	DIVERTED IN 10 <sup>TH</sup>
			4		YEAR <sup>.</sup>
Buy recycled products for "goodies" given out at schools and events.		, and the second se	Educate school students and other citizens of the importance of purchasing recycled products.	June 2016	
1	25				



Disaster Response

COMPLETED	INCOMPLETE		NEW/REVISED		
ACTIONS	ACTIONS		ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY	KEY ACTIONS	DATE	ESTIMATED TONS
		INCOMPLETE?		DUE	DIVERTED IN 10 <sup>TH</sup>
					YEAR
Contracted Unified Recovery Group, LLC to manage disaster debris.	•	· ·	Continue contract with Unified Recovery Group, LLC to manage disaster debris.	June 2013	

### Appendix G

Miscellaneous Supporting Data

### AGREEMENT FOR DEBRIS MANAGEMENT AND REMOVAL SERVICES

THIS AGREEMENT, made this Stay of June, 2009, by and between Brunswick County, North Carolina, hereinafter referred to as the "Owner" and Unified Recovery Group, LLC, hereinafter referred to as "Provider", for the term specified herein, agree as follows:

#### I. SCOPE

The Provider is to perform the Work described generally as the collection, loading, transporting, reduction, storage and disposal of debris caused by, or resulting from natural or man-made disasters including Federally declared disasters, and as may be more specifically defined in the exhibits attached hereto and amendments to this Agreement, if any. The exhibits attached hereto and any additional exhibits or subsequent amendments to this Agreement are incorporated by reference herein and made a part hereof as fully as if herein set forth. In addition, Provider shall provide such services to Owner or to Owner's duly authorized Independent Monitor ("IM"), as may be reasonably required in order to prepare and submit one or more applications for reimbursement, funding or other compensation from the State of North Carolina, the Federal Emergency Management Agency ("FEMA"), and/or such other State or federal agencies (the "Reimbursing Authority"), providing financial assistance in order to offset the cost of Provider's services. In connection with such assistance, Owner shall afford Provider access to meetings with the Reimbursing Authority and to data and other information necessary to comply with the reimbursement process. The Provider and Owner agree that, in order to qualify for one or more reimbursement grants or financial assistance offered by a Reimbursing Authority, the Owner may divide the Work into separate projects, whether based upon geographic distinctions, nature of debris or otherwise, (the "Projects"), provided that the division of the Work into Projects complies with the rules and regulations of the Reimbursing Authority.

Unless otherwise specified herein, the Provider is to furnish an adequate number of personnel and adequate functional equipment, together with all materials, tools, and consumables necessary to timely perform and complete the Work. Upon the execution of this Agreement,

Page 1 of 15

the Owner shall designate a duly authorized employee, representative or agent (the "Debris Manager"), who shall be responsible for the administration of this Agreement and who shall be Provider's point of contact with the Owner with respect to the performance of the Work under this Agreement.

#### II. ORDER OF PRECEDENCE

For the resolution and interpretation of any inconsistencies in this Agreement, the exhibits attached hereto and included herein by this reference, and any subsequent exhibits or amendments, the precedence of these documents shall be given in the following order:

- 1. This Agreement with any attachments, including Exhibits and Amendment(s) hereto;
- 2. If applicable, negotiated amendments or clarifications to the Provider's Proposal which have been incorporated by reference into the final Agreement;

#### III. TERM OF AGREEMENT

The term of this Agreement shall be for three (3) years, beginning on July 3, 2009, 2009. This Agreement may, upon the mutual written consent of the parties, be extended for a maximum of five years in the aggregate.

#### IV. COMPENSATION

The Provider agrees to perform the Work described herein and as specified in its proposal to the OWNER at a cost based upon the Fee Schedules set forth in Exhibit A and B attached hereto, as the same may be amended from time to time as provided herein.

#### V. PAYMENT

#### 1. Invoices:

Provider shall invoice Owner on a weekly basis for the amount of Work performed during the preceding week (the "Billing Period"). Should Owner elect to divide the Work into Projects, Provider shall invoice Owner for the amount of Work performed during the Billing Period for each Project. Provider, Owner and the IM shall coordinate their efforts to develop, perform, and complete Projects in compliance with the rules and regulations of the Reimbursing Authority so as to expedite the reimbursement of the costs incurred by the Owner pursuant to Page 2 of 15

this Agreement. Each invoice shall be prepared in a manner designed to comply with all applicable State and federal debris disposal reimbursement requirements and shall include all supporting documentation necessary to facilitate reimbursement. Generally, all invoices are due in full within 30 days from receipt. Per sec. 12.2 of the RFP, Contractor shall be paid a late payment charge consisting of interest calculated at the rate of one and one-half percent per month calculated from the expiration of the thirty day period until fully paid. Invoices shall be deemed to be received by Owner when submitted in compliance with this paragraph. All invoices shall be delivered to the Owner's office, at P.O. Box 249, Bolivia, North Carolina 28422, or other address designated by Owner.

#### 2. Completion of Work:

#### A. Notice of Substantial Completion:

Upon Provider's completion of the Work, Provider shall issue to Owner, with a copy to the IM, of its Notice of Substantial Completion. Upon Owner's receipt of such Notice, Owner shall have a period of TEN (10) business days to inspect the Work and determine if all Work has been completed to Owner's satisfaction. On or before the expiration of the TEN (10) day period, Owner shall deliver to the Provider a written notice, either in the form of a Notice of Acceptance or a Notice of Rejection. Should Owner reject all or any portion of the Work or any Project, the Notice of Rejection shall reasonably identify the portion of the Work or Project which has not been completed to Owner's satisfaction, together with an explanation of the basis for rejection, providing sufficient detail to enable the Provider to determine assess the merits of the rejection and consider appropriate measures by which to address the basis for rejection. At the request of Provider, the Debris Manager shall meet with the Provider and identify and discuss any Work or Project rejected by the Owner and reasons for such rejection. The Provider shall thereupon address the deficiencies identified, either by correcting same to Owner's satisfaction, or by meeting with Owner to discuss the rejection as set forth below.

#### B. Correction of Deficiencies; Provider Objection:

Should the Provider disagree with Owner's rejection of all or any portion of the Work

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or of any Project, the Provider shall meet with the Debris Manager and the IM in an effort to resolve the dispute. Should the parties be unable or unwilling to agree upon a resolution, the Provider shall be entitled to compensation for the Work or portion of Work or Project not in dispute, less the retainage. In such event, either party may seek a resolution of the disputed matter as set forth herein.

#### C. Notice of Acceptance:

Upon Owner's acceptance of the Work, or of any Project comprising a portion of the Work, the Owner shall issue a Notice of Acceptance as set forth below. Upon the issuance of such Notice of Acceptance, Owner shall remit to the Provider the held retainage associated with the Work or the Project accepted, together with the interest earned thereon. Should Owner elect to divide the Work into Projects as referenced above, the Provider shall be entitled to the amount of Retainage held by Owner and attributable to each Project, as each Project is accepted, together with the interest earned thereon.

#### 3. Payments:

All payments required hereunder shall be by check to Provider's office at 263 Third St. Baton Rouge, LA, 70801 or other address designated by Provider. In the alternative payment may be made by wire; Provider's wire instructions will be forwarded to Owner upon request.

#### VI. GENERAL CONDITIONS

#### 1. Termination for Default

#### A. By Owner:

The performance of Work under this Agreement may be terminated by the Owner in whole or in part, in writing, whenever the Owner shall determine that the Provider has failed to meet the performance requirements of this Agreement, has failed to make delivery of supplies or perform the work, or if the Provider fails to perform any other provision of this Agreement.

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#### B. By Provider:

The Provider may terminate this Agreement at any time should Owner fail to perform any of its material obligations under this Agreement, including, but not limited to the timely submission of invoices to the Reimbursing Authority, the Owner's failure to timely inspect and approve or reject any part of the Work or Project submitted by Provider as complete and Owner's failure or refusal to pay any invoice subject to the provisions herein.

#### 2. Termination for Convenience

Owner may terminate, in whole or in part, the performance of Work under this Agreement for convenience and without cause with THIRTY (30) days notice in writing to an authorized representative of Provider.

#### 3. Effect of Termination

Notwithstanding any termination of this Agreement by either Owner or Provider as set forth above, Provider shall be entitled to payment for all Work performed as of the date of termination, provided that such work is acceptable to the Owner. Notwithstanding any termination of this Agreement as set forth above, Provider shall be given the opportunity to complete any Work to which the Owner has objected.

#### 4. Performance Requirements and Services

#### A. Debris Removal:

The services to be rendered by Provider for the Owner as set forth in Section I. SCOPE include those which are necessary for the collection, loading, transporting, reduction, storage and disposal of vegetative debris and/or bulk refuse, construction & demolition ("C&D") materials, white goods and storm deposited soils or silt associated with the disaster (together, the "Eligible Debris") from Owner's streets, alleys, right-of-ways, drainage infrastructure, public parks and public places, including, but not limited to personal/private property and debris placed on or in these public sites as approved by the Owner to be removed by the Provider. Household Hazardous shall be segregated as provided in the attached Exhibit C. Included within the work to be

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performed under this Agreement shall be the clearing and removing of any and all eligible debris for the Owner by a process including: 1) examination of debris to be hauled; 2) cutting, clearing, stacking, sorting or moving debris to facilitate loading; 3) reduction of the debris by chipping, grinding, burning, compacting or other approved methods; and 4) loading and hauling debris to location(s) approved by the Owner.

#### B. Designation of Debris:

Debris to be removed by the Provider will be designated by the Debris Manager, or by the IM., or by other authorized agents or representatives.

#### C. Method of Work:

The method(s) utilized for Work to be performed under this Agreement shall be determined by the Provider and approved by the Owner. The Provider shall be entitled to employ heavy equipment, trucks, loaders, saws, chippers, incinerators and personnel necessary to accomplish the performance of the Work. The Owner may instruct the Provider to chip, grind, recycle or burn the Owner's vegetative waste materials. The Provider shall repair or cause to be repaired any damages caused by its use of heavy equipment, including the filling of any ruts, depressions or other surface disturbances. Notwithstanding the forgoing, the Owner may instruct the Provider to segregate some or all chipped or grinded materials for recycling purposes.

#### D. Compliance with Owner Requirements:

The Provider shall perform Work so as not to interfere with the normal operations of the Owner, or any other local, State or Federal government functions and/or so as not to violate existing regulations of these or other governmental or regulatory agencies. Provider shall comply with all applicable laws, whether State, local or federal, in the performance of the Work. Where necessary, the Provider shall consult with Owner in order to insure compliance with Owner's noise ordinance and nuisance abatement ordinance.

#### E. Interference with Provider:

Subject to the provisions of Paragraph D above, the Owner warrants to the Provider that the scope of Work shall be performed without interference by any other person or Page 6 of 15

legal entity contracting with the Owner for similar services or by any employees, contractors or subcontractors of the Owner so that the Provider shall have sole access to the sites for performance of the Work as necessary to avoid conflicts, delays, inefficiency and disruptions. Notwithstanding the foregoing however, the Provider shall cooperate with, and suffer the presence of, and equal access to, any and all sites where Work is being performed by the IM.

#### F. Price Adjustments:

- i. Agreed by parties: The prices for Work to be rendered pursuant to this Agreement as set forth in Exhibit A, or B, or both, may be adjusted either by change order or by any other amendment to this Agreement as may be mutually agreed upon, in writing by the Owner and the Provider.
- ii. Programmed increases: Adjustments shall be made in accordance with the percentage change as published in the U.S. Department of Labor Consumer Price Index (CPI) for:

Area: U.S. city average

#### Items: Gasoline, all types, per gallon/3.785 liters

The price adjustment rate shall be determined by comparing the percentage difference of, the CPI in effect for the average of the twelve months prior to the month of this agreement's confection, and the average of the twelve months for the twelve month period prior to the twelve months prior to the month of this agreement's confection period. The unit fees (Exhibit A) and time and material fees (Exhibit B) shall be increased by the lesser of the following: (1) the percentage difference between the CPI, or (2) 5%.

In the event the percentage difference does not increase or is negative, no adjustments to fees shall be made. Any adjustments shall be fully documented and submitted to the County. Cost adjustments, if any, shall be deemed effective on the day following each anniversary date of contract's execution by the County. No retroactive contract price adjustments affecting any period prior to the contract anniversary date will be allowed.

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Example: Contract signed January 2009. In January 2010, calculate the CPI average for months Jan-Dec 2009 (Group A average). Calculate the CPI average for months Jan-Dec 2008 (Group B average). Subtract Group B from Group A. If the difference is negative or zero, do nothing. If the difference is positive, the increase shall be implemented.

#### 5. Time of Completion

#### A. Time for Completion:

#### B. Excusable Delays:

The Provider or Owner, respectively, shall not be liable for any loss or damage, resulting from any delay or failure to perform its contractual obligations within the Work Period described above, due to acts of God, actions or regulations by any governmental entity or representative, strikes or other labor disruptions, fire, or any other causes, contingencies or circumstances, which, despite the exercise of reasonable diligence, was not within the Provider's and/or Owner's control, respectively, whether of a similar or dissimilar nature, and which could not have been reasonably avoided.

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Any such causes of delay, even though existing on the date of the Agreement or on the date of the start of Work, shall extend the time of the Provider's and/or the Owner's performance, by the length of the delays occasioned thereby, including delays reasonably incident to the resumption of normal Work schedules. However, under such circumstances as described herein, the Owner may at its discretion, cancel this Agreement for its convenience.

#### 6. Indemnification and Insurance

#### A. Hold Harmless:

The Provider hereby agrees to indemnify and hold harmless the Owner, its elected public or appointed public officials, officers, agents, and employees, from and against any and all liability for damages resulting from any claims, demands, suits, proceedings or actions asserted by any natural or legal person, arising out of, or related to the performance of the obligations set forth in this agreement, or of any act, or failure to act by Provider, its employees, agents, representatives, unless such claims, demands, suits, proceedings, actions, or liability result solely from the wrongful acts or omissions of the Owner, its elected public officials, officers, agents and employees.

#### B. Required Insurance:

The Provider, at its own expense, shall keep in full force and effect and at all times maintain during this Agreement and thereafter as provided in Article VIII, Section 8, the insurance coverage set forth below. All insurance coverage required by this Agreement shall be issued by a carrier authorized to do business in the State of North Carolina and acceptable to Owner. Wherever possible, the Owner shall be named as an additional insured under each policy of insurance required hereunder. The Commercial General Liability Insurance and automobile liability policies required hereunder shall provide that the Owner shall be notified at least THIRTY (30) days in advance of any reduction or cancellation in coverage. As to each policy of insurance required herein, the Provider shall, within TEN (10) business days of the date hereof, provide Owner with satisfactory proof of the following insurance coverage:

#### (1.) Commercial General Liability Insurance

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Commercial General Liability Insurance, issued by one or more responsible insurance companies and in a form acceptable to the Owner, with coverage limits of not less than One Million Dollars (\$1,000,000) per occurrence for Bodily Injury and Property Damage.

#### (2.) Automobile Liability Insurance

Automobile Liability coverage, issued by one or more responsible insurance companies and in a form acceptable to the Owner, with coverage amounts of not less than One Million Dollars (\$1,000,000) per occurrence.

#### (3.) Workers' Compensation Coverage

Full and complete Workers' Compensation Coverage, in the minimum amount required by the laws of the State of North Carolina.

#### (4.) Insurance Certificates

The proof of the insurance coverages required hereunder shall be evidenced by a Certificate of Insurance or such other evidence of coverage as may be acceptable to the Owner. Provider will update all insurance required hereunder as necessary and will promptly provide Owner with satisfactory evidence of renewals of coverage. Notwithstanding Owner's agreement to accept a Certificate of Insurance as proof of the coverage required hereunder, Provider shall maintain all policies of Insurance for which any such Certificate is issued and shall provide Owner with a copy of any such policy of Insurance upon Owner's request.

#### 7. Acceptance

As set forth in Article IV, Section 3., Paragraph C., above, the Owner will be deemed to have accepted the Work or Project, and shall issue to Provider a Notice of Acceptance of the Work or Project after the Owner is notified by the Debris Manager, with the concurrence of the IM, that the Work or Project has been satisfactorily completed. Should the Owner elect to divide the Work into Projects as set forth above, the Owner may, at its option, accept the Work associated with each Project as such Project is completed. In such event, the Owner shall deliver to the Provider any such Notice of Acceptance.

#### 8. Correction of Work

Page 10 of 15

a a			

As set forth in Article V, Section 3, Paragraphs A and B above, should the Owner reject the Work or any Project which forms a part of the Work, the Provider shall promptly correct all Work or any Project rejected by the Owner which fails to conform to this Agreement, unless the Provider objects to the Owner's determination that such Work or Project is incomplete or unsatisfactory. The Debris Manager shall be available to meet with Provider as requested in order to explain the basis for Owner's rejection of any of the Work or any Project, to discuss correction of the identified deficiencies and to inspect the subject Work or Project with the Provider in order to ensure an understanding of the basis for rejection and the corrective work required in order to obtain Owner's acceptance. The Provider shall bear all costs of any corrections to rejected Work, except to the extent that the parties should otherwise agree in writing. In addition to Work or a Project deemed by the Owner to be incomplete or unsatisfactory, Owner may reject any portion of the Work or any portion of a Project which is deemed by the Owner or IM as being ineligible for reimbursement by the Reimbursing Authority. Notwithstanding the forgoing however, no part of the Work or of any Project may be rejected as being ineligible for reimbursement which Owner directed be undertaken in contradiction to the Reimbursing Authorities requirements for reimbursement.

#### 9. Right to Audit Records

#### A. Project Designation:

With respect to Provider's books and records generated as a result of the Work performed hereunder, Provider agrees to use its best efforts to mark each such document in a prominent location with any project number or other identifying designation assigned to the Work or any Project under the scope of the Work by the Owner.

#### B. Access to Books and Records:

Provider will provide access to books, documents, papers, and records which are directly pertinent to this Agreement for the purpose of audit and examination. Upon reasonable notice, Provider will permit the inspection, examination and audit of such books and records by Owner or Owner's duly authorized representative, at Provider's

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principal place of business, during normal business hours, or at the Owner's option, Provider will make such books and records available at Owner's principal place of business. If requested by Owner, a representative of the Provider with a knowledge and understanding of Provider's books and records related to the Work will be provided to assist Owner with its review of the Work documents and to answer any questions, or provide any additional information which the Owner may reasonably request related to the Work.

#### C. Copies of Records:

Upon the completion of the Work or any Project under the scope of Work, or at any other time that the Owner may reasonably request, Provider shall tender to the Debris Manager copies of each and every document, record or other evidence of the performance of the Work, in whatever form such material may exist, arising out of, or related to any of the Work performed pursuant to this Agreement. Should Owner so request, the material required to be provided hereby shall be produced in electronic format.

#### D. Retention of Records:

Provider will retain all books and records related to this Agreement for a period of three years following close-out of the Work or Project following Owner's submission of its final expenditure report, which is the project completion and certification report.

#### E. Applicability to Contractors and Subcontractors:

To the extent that Provider utilizes one or more subcontractors in connection with the performance of the Work or any Project, Provider will require each such subcontractor to comply with the provisions of paragraphs A and B above.

#### 10. Owner's Responsibilities

Owner shall be responsible for providing information required by Provider that qualifies as a public record under North Carolina law and that is available in the files of the Owner and for providing/making available such public information as may be required to assist Provider in the performance of its duties under this Agreement. Owner is responsible for providing a suitable TDSRS site for Provider's use during the project. Provider shall be consulted for its consent on suitability determinations for proposed sites, but its consent

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shall not be unreasonably withheld.

#### 11. Environmental Conditions, Differing Site Conditions or Delays

If site conditions are encountered which necessitate operations other than standard debris removal, including, but not limited to, environmental conditions, hazardous/contaminated waste, human remains or other conditions requiring special treatment or resulting in the interruption or delay of operations to the Provider, or to comply with local, state or federal laws or regulations, an equitable adjustment shall be made to the contract by written change order as agreed by the parties.

#### VIII. MICELLANEOUS PROVISIONS

- Assignment of this Agreement shall not be made without the advance written consent of the Owner.
- The Provider shall comply with all applicable federal, state and local laws, ordinances, rules and regulations pertaining to the performance of Work under this Agreement.
- 3. No waiver, alterations, modification, revision, or amendment of any of the provisions of this Agreement or any exhibits hereto, including, but not limited to any change orders, shall be binding unless in writing and signed by the Owner and the Provider.
- 4. The Provider shall procure all required permits, licenses, and certificates, or any such approvals of plans or specifications as may be required by federal, state and local laws, ordinances, rules, and regulations, for proper execution and completion of the Work under this Agreement, including, without limitation, temporary and permanent disposal permits or permits for disposal or storage sites and/or staging areas, including permits to burn debris. Copies of such permits for any location at which Eligible Debris collected by Provider pursuant to this Agreement is temporarily or permanently stored, reduced, chipped, grinded, burned and/or disposed of, shall be provided to Owner
- 5. Provider will comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency Regulations (40 CFR part 15).

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- 6. Upon the termination of this Agreement for any reason, the provisions of Article VII, Section 5, Paragraphs A & B and Article VII, Section 9 (D) shall survive.
- 7. The undersigned hereby certify that this Agreement is made without prior understanding, agreement or connection with any corporation, firm or person who solicited for the Work covered by this Agreement and is in all respects fair and without collusion or fraud.
- 8. Each party hereby warrants and certifies that its undersigned representative is authorized to enter into this Agreement on its behalf and that upon such execution, this Agreement, together with all exhibits hereto, shall be binding and enforceable without the need for further action or approval.
- 9. This Agreement, including any Exhibits hereto, contains all the terms and conditions agreed upon by the parties. No other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind either party hereto.
- 10. For ease of execution, the parties stipulate that this Agreement may be executed in duplicate originals. Furthermore, the executed signature pages may be transmitted by facsimile or email, with the original executed signature pages to be delivered by overnight service or other means acceptable to the Parties.
- 11. Neither the entire Agreement nor any provision in it shall be (a) deemed to have been proposed or drafted by any Party or (b) construed against any Party.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals on the date first written above.

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Brunswick County, North Carolina	, ONENER Attest:
By and through its Board of Commiss.	Constant Dehb The
Chairman	
Approved as to Form	
Office of the County Attorney	"This instrument has been producted in the manner required by the Lord Government Budget and Fiscal
Hung Thanhall	Ann B. Hardy, Finance Director  Brunswick County, North Carolina  Page 14 of
	Dogo 14 of



Unified Recovery Group, LLC, PROVIDER

BY: Joel K. Scalos, Chief Financial Officer 263 Third St., Fifth Floor Baton Rouge, LA 70101

#### ADDENDUM NO. I

The following Amendment shall be added to and incorporated into that certain Agreement for Debris Management and Removal dated June 15, 2009 by and between Unified Recovery Group, LLC ("Provider") and Brunswick County, North Carolina.

The following section shall be added to the Contract:

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- Performance and Payment Bond: Upon the occurrence of an event which causes the Owner to request services from the Provider to perform Work under this Agreement, the Provider will provide a Performance and Payment Bond from a Surety company authorized by the State of North Carolina in the estimated amount of the Work. Such Performance and Payment Bonds shall be for Work as set forth herein and it is agreed that no such individual Performance and Payment Bond limit shall exceed \$5,000,000.
  - a. It is further agreed that, upon execution of this Amendment, Provider shall, at its sole expense, immediately submit to Owner and shall thereafter at all times maintain and keep in full force and effect a Bond in the amount of \$1,000,000.00 issued by a Surety company authorized by the State of North Carolina, guaranteeing that Provider shall meet the obligations outlined in Paragraph 6(C), and which shall supersede and replace the Bid Bond previously submitted with the Providers proposal, such Bid Bond having no further force and effect. Within 90 days of the expiration of the Bond Provider shall submit to Owner a continuation certificate issued by the Surety evidencing the continuing nature of the obligation thereunder or shall provide a replacement bond in the amount of \$1,000.000.00 issued by a Surety authorized by the State of North Carolina. The failure of Provider to at all times maintain and keep in full force and effect the Bond provided for herein shall be deemed a material breach of this Agreement.

Dated this 1st day of February . 2009 2010

Brunswick County, North Carolina

Unified Recovery Group, LLC

by: Usu Lie

s. J. S. Lawrence Green, Chic

#### ADDENDUM NO. 2

The following Addendum shall replace and supersede Addendum No. 1 previously executed by the parties, and shall be added to and incorporated into that certain Agreement for Debris Management and Removal dated June 15, 2009 by and between Unified Recovery Group, LLC ("Provider") and Brunswick County, North Carolina.

The following section shall be added to the Contract:

- C. Performance and Payment Bond: Upon the occurrence of an event which causes the Owner to request services from the Provider to perform Work under this Agreement, the Provider will provide a Performance and Payment Bond from a Surety company authorized by the State of North Carolina in the estimated amount of the Work. Such Performance and Payment Bonds shall be for Work as set forth herein and it is agreed that no such individual Performance and Payment Bond limit shall exceed \$5,000,000.
  - It is further agreed that, upon execution of this Amendment, Provider shall, at its sole expense, immediately submit to Owner and shall thereafter at all times maintain and keep in full force and effect a Bond in the amount of \$1,000,000.00 issued by a Surety company authorized by the State of North Carolina, guaranteeing that Provider shall meet the obligations outlined in Paragraph 6(C), and which shall supersede and replace the Bid Bond previously submitted with the Providers proposal; such Bid Bond having no further force and effect. The Bond will initially cover the period from March 31, 2010 through June 30, 2011. In every subsequent year of the contract, within 90 days of the expiration of the Bond, Provider shall submit to Owner a continuation certificate issued by the Surety evidencing the continuing nature of the obligation thereunder or shall provide a replacement bond in the amount of \$1,000,000.00 issued by a Surety authorized by the State of North Carolina. The failure of Provider to at all times maintain and keep in full force and effect the Bond provided for herein shall be deemed a material breach of this Agreement. Such failure shall entitle Owner to any and all remedies available under the contract, including immediate termination of the contract, but shall not create any remedy or cause of action on the bond or against Surety.

Dated thisday of	, 2010	
Brunswick County, North Carolina		Unified Recovery Group, LLC
by:		be loelly

#### Extension Agreement by and between

#### Brunswick County, NC and Unified Recovery Group, LLC

The parties named above executed a service agreement on June 1, 2009 for disaster recovery and debris removal, which by its terms expires on July 1, 2012. The parties mutually wish to extend this agreement beyond the original term as provided in Section III of the agreement.

Upon execution of this agreement, the parties do extend the duration of the abovementioned contract and hereby amend its expiration date to: July 1, 2013. It is further agreed that all other original terms and conditions of the contract and any addendum(s), shall remain unchanged.

This agreement shall be binding upon and inure to the benefit of the parties, their successors, assigns and personal representatives.

Signed this 14 day of June	, 2012.
Unified Recovery Group, LLC	
BY: Dillars [print name] Daniel B. Davis	Witness: Mia Deg
Brunswick County, NC	
BY. SMARIA	Witness

[print name] Stephanie (can)